(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 9 October 2003 (09.10.2003)

PCT

(10) International Publication Number WO 03/082766 A1

C04B 28/14, (51) International Patent Classification7: 24/26, 40/00, 24/38, E04F 15/12

PCT/US03/09400 (21) International Application Number:

(22) International Filing Date: 27 March 2003 (27.03.2003)

English (25) Filing Language:

English (26) Publication Language:

(30) Priority Data: 27 March 2002 (27.03.2002) US 60/367,920

(71) Applicant (for all designated States except US): UNITED STATES GYPSUM COMPANY [US/US]; 125 S. Franklin Street, Chicago, IL 60606 (US).

(72) Inventors; and

Inventors/Applicants (for US only): LETTKEMAN, Dennis, Mark [US/US]; 1316 N. Noble, Watonga, OK 73772 (US). WHITESIDE, Eldon, L. [US/US]; 5539

Quincy Street, Hinsdale, IL 60521 (US). BEDWELL, William, K. [US/US]; RR1, Box 26, Okeene, OK 73763 (US). KALIGIAN, Raymond, A., II [US/US]; 2020 Wellington Ct., Geneva, IL 60134 (US). MEISEMAN, Sharon [US/US]; 204 Williams, Okeene, OK 73763 (US).

(74) Agent: MICKELSON, Carole, A.; Greer, Burns & Crain, Ltd., 300 South Wacker Drive, Suite 2500, Chicago, IL 60606 (US).

(81) Designated States (national): CA, JP, MX, US.

(84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH STRENGTH FLOORING COMPOSITIONS

(57) Abstract: A composition is disclosed for a mixture to be used in conjunction with water for preparing a slurry that hydrates to form a high strength flooring compound. The mixture includes from about 50% to about 98% by weight calcium sulfate hemihydrate, having at least 25% of the calcium sulfate hemihydrate in the beta-calcined form. A polycarboxylate dispersant is included in the mixture in amounts from about 0.2% to about 10% by weight. The mixture also includes 0.05-50% by weight enhancing component. When combined with recommended amounts of water, a slurry is formed that is useful as a flooring composition.